PRIMACAINE™ adrénaline 1/100 000

1 - DENOMINATION

PRIMACAINE ADRENALINE 1/100 000, injectable solution for dental use.

2 - QUALITATIVE AND QUANTITATIVE COMPOSITION

Articaïne	60.277 mg
in the form of articaine hydrochloride	
Adrenaline	0.017 mg
in the form of adrenaline tartrate	

for one cartridge of 1.7 ml.

For the complete list of excipients, see § 6.1

3 - PHARMACEUTICAL FORM

Injectable solution for dental use.

4 - CLINICAL DATA

4.1 Therapeutic indications

Local or loco-regional anaesthesia in odonto-stomatological practice.
This presentation is particularly adapted when procedures require a high ischemia.

4.2 Dose and mode of administration

Reserved for adult and child over 4 as this type of anaesthesia is unsuitable before this age.

Dose

Adult

The quantity to be injected must be adapted according to the extent of the procedure.
Usually, half to one cartridge for a common procedure.
Do not exceed the dose of 7 mg of articaine hydrochloride per kilogram of bodyweight.

Child (over 4)

The injected quantity depends on the child's age, weight and the type of procedure performed.
The maximal dose to expect is 5 mg of articaine hydrochloride (0.125 ml of anaesthetic solution) per kilogram of bodyweight.
The mean dose in mg of articaine hydrochloride that can be administered in a child can be calculated as follow:
Child's weight (in kilograms) x 1.33

Elderly subject

Administer half of the dose indicated for adults.

Mode of administration

LOCAL OR REGIONAL INTRA-ORAL SUBMUCOSAL INJECTION.
Verify the absence of vascular effraction by repeated aspiration tests, particularly during regional anaesthesia (nerve blocks).
The injection rate must not exceed 1 ml of solution per minute.

4.3 Contraindications

This medicine is CONTRAINDICATED
• in the case of hypersensitivity to local anaesthetics or to one of the constituents, and in the following situations:
- severe disorders of atrioventricular conduction without a pacemaker;
- epilepsy not controlled by treatment;
- porphyria.
This medicine is USUALLY UNADVISED in association with sibutramine (see § 4.5).

4.4 Special warnings and precautions for use

Warnings

THIS PRODUCT CONTAINS 1/100 000 ADRENALINE.
Take the risk of local necrosis into account in hypertensive or diabetic subjects.
Anaesthesiophagy risks: all kind of bites (lips, cheeks, mucous, tongue); advise patients to avoid the use of chewing gum or eating food as long as the insensitivity persists.
The use of this product is not recommended in children under the age of 4 years, as this type of anaesthesia is unsuitable before this age.
Avoid injection into infected and inflamed areas (decreased efficacy of the local anaesthetic).
Sportsmen must be advised that this medicine contains an active substance that can cause a positive reaction on anti-doping control tests.

Precautions for use

The use of this product requires imperatively and previously:
• to conduct a clinical interview to determine the clinical context, concomitant treatments and the patient's past history;
• to perform a test injection of 5 to 10 % of the dose in the case of a risk of allergic reaction;
• to perform the injection slowly and strictly outside of the vessels, verifying by repeated aspirations;
• to maintain verbal contact with the patient.
Increased surveillance is required in subjects treated with anticoagulants (surveillance of the INR).
Due to the presence of adrenaline, precautions and increased surveillance in case of:
• all rhythm abnormalities, except bradycardia;
• coronary insufficiency;
• severe arterial hypertension.
The dose of articaine may need to be decreased in case of severe hepatocellular insufficiency, due to the mainly hepatic metabolism of amide local anaesthetics.
The dose must also be decreased in case of hypoxia, hyperkalaemia or metabolic acidosis.
The simultaneous administration of this anaesthetic with some products (see § 4.5) requires a close monitoring of the patient's clinical and biological state.

4.5 Interactions with other drugs or other forms of interactions

Associations not recommended

Due to the presence of adrenaline:
+ Sibutramine:
Paroxystic hypertension with possibility of rhythm abnormalities (inhibition of the adrenaline or nor-adrenaline' s entrance in the sympathetic fibre).

Associations with precautions for use

Due to the presence of adrenaline:
+ Halogenated volatile anaesthetics:
Serious ventricular rhythm abnormalities (increase of the cardiac reactivity).
Limit the dose, for example: less than 0.1 mg of adrenaline in 10 minutes or 0.3 mg in one hour in adult.

+ Imipraminic anti-depressors:
Paroxystic hypertension with possibility of rhythm abnormalities (inhibition of the adrenaline or nor-adrenaline' s entrance in the sympathetic fibre).
Limit the dose, for example: less than 0.1 mg of adrenaline in 10 minutes or 0.3 mg in one hour in adult.

+ Serotoninergic-noradrenergic anti-depressors (described for minalcipran and venlafaxine):
Paroxystic hypertension with possibility of rhythm abnormalities (inhibition of the adrenaline or nor-adrenaline' s entrance in the sympathetic fibre).
Limit the dose, for example: less than 0.1 mg of adrenaline in 10 minutes or 0.3 mg in one hour in adult.

+ Non selective MAOI (iproniazide):
Increase of the adrenaline and nor-adrenaline's pressive action, more often moderated.
Use only under strict medicinal control.

+ "A" Selective MAOI (moclobemide, toloxatone) by extrapolation from the non selective MAOI:
Risk of increase of the pressive action.
Use only under strict medicinal control.

Associations to take into account

+ Guanethidine:
High increase of the blood pressure (hyper reactivity due to the reduction of the sympathetic tonus and/or to the inhibition of the adrenaline or nor-adrenaline's entrance in the sympathetic fibre).

4.6 Pregnancy and breastfeeding

Pregnancy

The studies carried out on animals do not show any teratogenic effect.
Due to the absence of teratogenic effect on animals, a malformative effect on mankind is not expected. Indeed, until today, the substances responsible of malformations on mankind have been teratogenics on animals during studies carried out on two species.
In clinical practice, there are actually not enough relevant facts to estimate an eventual malformative or foetotoxic effect of the articaine when administered during pregnancy.

Consequently, in the odonto-stomatological indications, articaine should only be used during pregnancy if necessary.

Breastfeeding
Like other local anaesthetics, articaine diffuses into breast milk in very small quantity; however, breastfeeding can be continued following the anaesthetic procedure.

4.7 Effects on ability to drive and use machines
This product can modify the ability to drive and use machines.

4.8 Undesirable effects
Like with all the anaesthetics used in odonto-stomatology, lipothymies can occur.
This product contains sodium metabisulphite, which can involve or worsen anaphylactic reactions.
In the case of overdose or in certain predisposed patients, the following clinical signs may be observed:
• on the central nervous system: nervousness, agitation, yawning, tremor, apprehension, nystagmus, logorrhoea, headache, nausea, ringing in the ears. In the presence of these warning signs, the patient must be asked to hyperventilate, and attentive surveillance is required to prevent possible deterioration with seizures followed by CNS depression.
• on the respiratory system: tachypnoea, then bradypnoea, possibly leading to apnoea.
• on the cardiovascular system: tachycardia, bradycardia, cardiovascular depression with arterial hypotension, possibly leading to collapse, arrhythmias (premature ventricular complexes, ventricular fibrillation), disorders of conduction (atrioventricular block). These cardiac manifestations can lead to cardiac arrest.

4.9 Overdose
Toxic reactions, witnesses of an overdose in local anaesthetic, can occur in two situations: either immediately, due to relative overdose resulting from accidental intravenous injection, or more delayed, corresponding to true overdose due to the use of an excessive quantity of anaesthetic.

Action in case of overdose
As soon as warning signs are observed, ask the patient to hyperventilate, place the patient in the supine position, when necessary.
In the case of clonic seizures, oxygenation and injection of a benzodiazepine.
Treatment may require intubation with assisted ventilation.

5 - PHARMACOLOGICAL PROPERTIES
5.1 Pharmacodynamic properties
Pharmacotherapeutic class: **LOCAL ANAESTHETICS**, ATC Code: **N01BB58**
The articaine hydrochloride is a local anaesthetic with an amide function, which interrupts the nerve impulse along the nerve fibre at the injection site.
The addition of adrenaline diluted at 1/100 000 to the solution of articaine delays the passage of the articaine into the systemic circulation and maintains an active tissue concentration, allowing to obtain a little hemorrhagic operative field.
The anaesthesia is achieved within 2 to 3 minutes. The duration of anaesthesia allowing the surgical procedure is about 60 minutes. It is 2 to 3 times shorter for pulpar anaesthesia.

5.2 Pharmacokinetic properties
Injected in the buccal mucosa, the articaine blood concentration peak is obtained within 30 minutes after the injection.
The elimination half-life of articaine hydrochloride is about 110 minutes.
Articaine hydrochloride metabolism is mainly hepatic; 5 to 10 % of the dose are eliminated under unchanged form in the urine.

5.3 Preclinical safety data
Studies carried out on animals have shown the good tolerance of articaine.
Like other amide local anaesthetics, high doses of the active substance can induce toxic reactions on the central nervous system and/or cardiovascular system (see § 4.8).

6 - PHARMACEUTICAL DATA
6.1 List of excipients
Sodium chloride, sodium metabisulphite, hydrochloric acid, sodium hydroxide, water for injectable preparations.

6.2 Incompatibilities
In the absence of compatibility studies, this drug should not be mixed with other drugs.

6.3 Shelf life
Before opening: 2 years.
After opening: the product must be used immediately.

6.4 Special storage precautions
Store at a temperature not exceeding + 25 °C.
Store cartridges in the external packing and protected from light.

6.5 Nature and content of external packing
1.7 ml in cartridge (colourless glass of type I) with a stopper (bromobutyle) and capsule (aluminium) with seal (bromobutyle). Box of 50.

6.6 Special precautions for disposal and handling
Like for all cartridges, the diaphragm will be disinfected just before use. It will be carefully plugged:
• either with ethyl alcohol at 70 %,
• or with pure isopropyl alcohol at 90 % for pharmaceutical use.
The cartridges must never be plunged in any solution.
Do not mix the injectable solution with other products in the same syringe.
Any opened cartridge of anaesthetic solution must not be re-used.

7 - HOLDER OF MARKETING AUTHORIZATION
LABORATOIRE PRODUITS DENTAIRES PIERRE ROLLAND
Zone Industrielle du Phare
17 avenue Gustave Eiffel
33700 MERIGNAC - FRANCE

8 - REGISTRATION ID NUMBER
3400956469659: 1.7 ml in cartridge (glass) with a stopper (bromobutyle). Box of 50.

9 - DATE OF FIRST AUTHORIZATION/OF RENEWAL OF AUTHORIZATION
24 December 2002/24 December 2007

10 - DATE OF TEXT UP-DATING
19 April 2010

CONDITIONS OF PRESCRIPTION AND DELIVERY
List I.
RESERVED FOR PROFESSIONAL DENTAL USE.